In the Claims:

1. (Currently Amended) An adaptive interconnect for providing an interface between multiple modules and a control system comprising:

a) a control system interface;

b) a plurality of module interfaces; and

c) adaptive interconnect logic associated with the control system interface and the plurality of module interfaces and adapted to:

i) negotiate with a module over a control path via one of the plurality of module interfaces to identify an interface personality for the module;

ii) select the interface personality based on negotiations with the module; and

iii) apply the interface personality to the one of the plurality of module interfaces, such that the applied interface personality provides an appropriate interconnection between the control system interface and the one of the plurality of module interfaces via a plurality of pins.

2. (Original) The adaptive interconnect of claim 1 wherein different interface personalities can be implemented simultaneously among the plurality of module interfaces.

3. (Original) The adaptive interconnect of claim 1 wherein the adaptive interconnect logic is further adapted to renegotiate with the module over the control path if initial negotiations fail.

4. (Original) The adaptive interconnect of claim 3 wherein if the renegotiation fails, the adaptive interconnect logic is further adapted to send a notification of failure.

5. (Currently Amended) The adaptive interconnect of ~~claims~~ claim 1 wherein the adaptive interconnect logic is further adapted to:

a) receive a stimulus indicative of a change in personality for the module;

b) renegotiate with the module over the control path via the one of the plurality of module interfaces to identify a new interface personality for the module;

c) select the new interface personality based on the renegotiations with the module; and

d) apply the new interface personality to the one of the plurality of module interfaces.

6. (Original) The adaptive interconnect of claim 1 wherein negotiating, selecting and applying the interface personality are dynamic and occur automatically upon plugging the module into the one of the plurality of module interfaces.

7. (Currently Amended) A method for providing an interface between multiple modules and a control system comprising:

a) negotiating with a module over a control path via one of a plurality of module interfaces to identify an interface personality for the module;

b) selecting the interface personality based on negotiations with the module; and

c) applying the interface personality to the one of the plurality of module interfaces, such that the applied interface personality provides an appropriate interconnection between the control system and the one of the plurality of module interfaces via a plurality of pins.

8. (Original) The method of claim 7 wherein different interface personalities can be implemented simultaneously among the plurality of module interfaces.

9. (Original) The method of claim 7 further comprising renegotiating with the module over the control path if initial negotiations fail.

10. (Original) The method of claim 9 wherein if the renegotiation fails, further comprising sending a notification of failure.

11. (Currently Amended) The method of claim 7 further comprising:

a) receiving a stimulus indicative of a change in personality for the module;

b) renegotiating with the module over the control path via the one of the plurality of module interfaces to identify a new interface personality for the module;

c) selecting the new interface personality based on the renegotiations with the module; and

d) applying the new interface personality to the one of the plurality of module interfaces.

12. (Original) The method of claim 7 wherein negotiating, selecting and applying the interface personality are dynamic and occur automatically upon plugging the module into the one of the plurality of module interfaces.

13. (New) The adaptive interconnect of claim 1 wherein the plurality of pins include power pins, control pins, and datapath pins.

14. (New) The adaptive interconnect of claim 13 wherein the adaptive interconnect logic negotiates with the module using the control pins.

15. (New) The adaptive interconnect of claim 1 wherein the interface personality further defines signal levels for communications with the module.

16. (New) The adaptive interconnect of claim 1 wherein the interface personality further defines an acceptable protocol for communications with the module.

17. (New) The method of claim 7 wherein the plurality of pins include power pins, control pins, and datapath pins.

18. (New) The method of claim 17 wherein the negotiating step with the module is performed using the control pins.

19. (New) The method of claim 7 wherein the interface personality further defines signal levels for communications with the module.

20. (New) The method of claim 7 wherein the interface personality further defines an acceptable protocol for communications with the module.